

# \$ENSIBLE \$UPPLEMENTATION

**Herd management and nutrition**



@QldAgriculture  
@futurebeef  
#eatqld  
#beefextension



# Webinar Series Outline

## 1 September

- Practical cattle nutrition
- Limiting nutrients
- Legumes
- Pasture intake

## Today

- Herd management and nutrition

## 15 September

- Choosing and managing supplements



# Upcoming free workshops

## Central Queensland

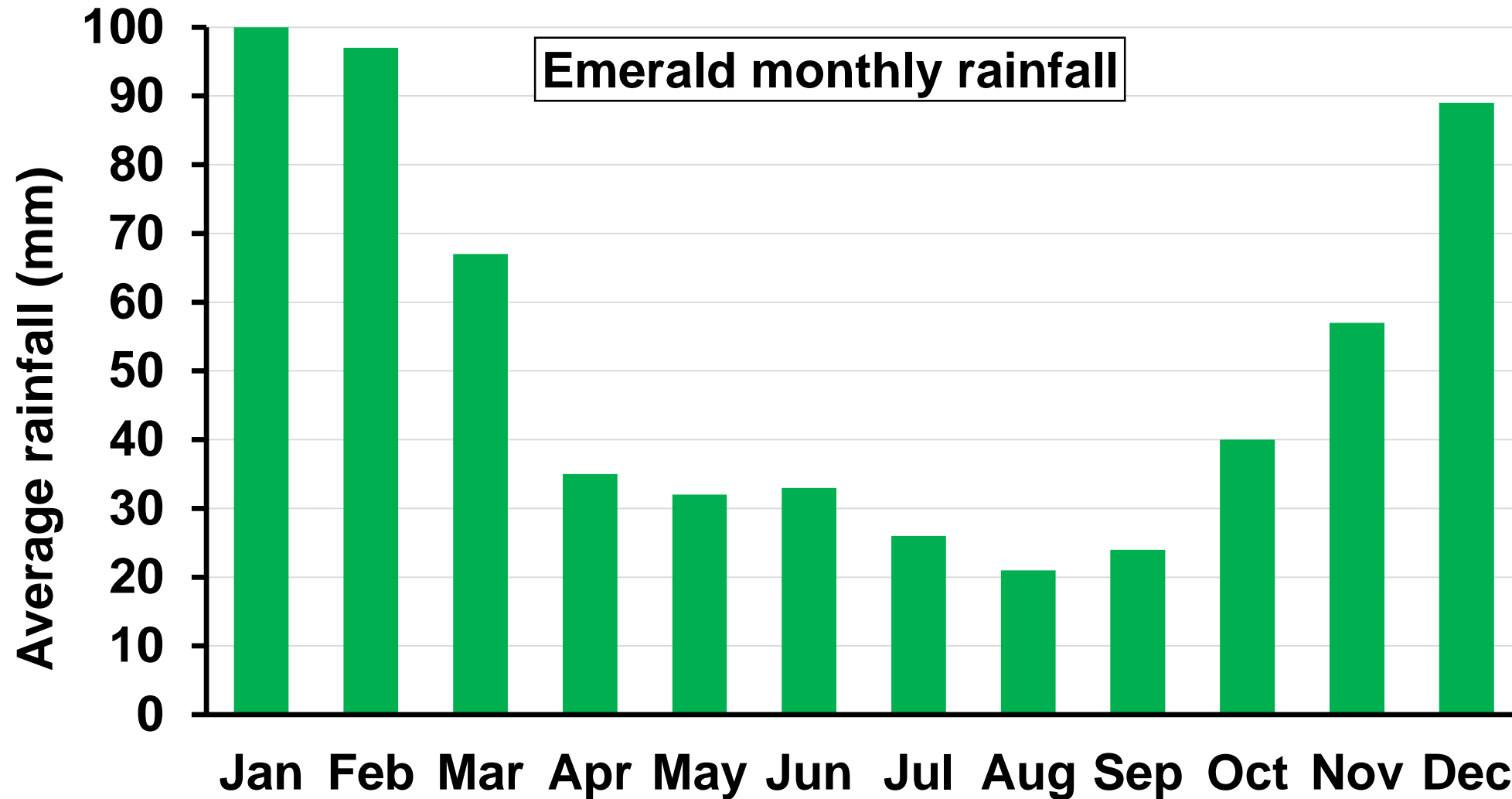
- Mon 20<sup>th</sup> September - Gin Gin
- Tues 21<sup>st</sup> September - Miriam Vale
- Wed 22<sup>nd</sup> September - Gracemere
- Tues 26<sup>th</sup> October - Biloela
- Wed 27<sup>th</sup> October - Taroom
- Fri 29<sup>th</sup> October - Alpha

## Southern Queensland

- Tues 23<sup>rd</sup> November – Gympie
- Wed 24<sup>th</sup> November – Proston
- Thurs 25<sup>th</sup> November - Biggenden



# Diet quality is closely related to the season



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- Protein becomes limiting first then energy
- Wet cows are invariably below maintenance for protein and energy until the season breaks

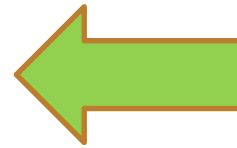
Protein & energy  
Content decreases





# Filling the dry season gap?

Dry season energy deficit for a  
450 kg lactating cow  
36 MJ ME/day



4.1 kg molasses

3.4 kg sorghum

3.3 kg copra meal

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# Filling the dry season gap?

	Dry cow last trimester		Lactating cow	
	Protein deficit (g CP/day)	Energy deficit (MJ ME/day)	Protein deficit (g CP/day)	Energy deficit (MJ ME/day)
Dry season feed	237	16	578	36
Dry season feed + dry lick (150 g protein/day)	20	7	361	27
Dry season feed + 2 kg M8U/day (16 MJ ME/day)	266	9	75	11

**Breeders require body condition reserves to handle periods when diet is below maintenance**

# Breeder Body Condition Scores

**BCS 1 – Poor**



**BCS 2 – Backward store**



**BCS 3 – Store**



**BCS 4 – Forward store**



**BCS 5 – Fat**





# End of dry season body condition & expected pregnancy rates

Condition score	Description	Expected pregnancy rate next mating (%)
1	Poor	0-40
2	Backward store	20-50
3	Store	40-80
4	Forward store	60-90
5	Fat	80-95

**Forward store at  
calving is insurance  
against a late season  
break**



**Fat**  
**27 MJ ME/kg**

**Molasses**  
**8.7 MJ ME/kg**

**Whole cottonseed**  
**13 MJ ME/kg**

## How much do management options reduce dry season breeder live weight loss?

Management option	Benefit per month	Benefit per dry season
Increased body reserves at start of dry season (e.g. up to 90 kg with P supplementation)		~½ of the additional LW
Earlier weaning	5 – 13 kg	~60 kg
Urea supplements	0 – 7 kg	0 – 40 kg
Molasses-urea supplements (M8U)	15 – 25 kg	~75 kg



# How long can your cows hang on for?

<b>Calving date</b>	<b>Days to 26 Jan</b>
<b>1 Jul</b>	<b>209</b>
<b>1 Sep</b>	<b>148</b>
<b>1 Nov</b>	<b>87</b>

- **Time calving to prevent cows lactating for too long on dry season feed**
- **Manage grass and body condition so the cattle and country can handle a late break**

# Emerald rainfall

## Green date - When does the season break?

When can rain can be expected after 1 Sep?

Rainfall over maximum of 3 days	25 mm	50 mm
50% of years	28-Oct	22-Dec
70% of years	18-Nov	10-Jan

How much rain can be expected in April?

Rainfall over maximum of 3 days	25 mm	50 mm
% of years	35%	17%

# Factors to consider in joining times

- **A compromise between starting too soon and finishing too late**
- **Earlier calving is easier with:**
  - **Good country**
  - **Lighter stocking**
  - **Better management of body condition**
  - **More supplementation**
- **Earlier calving produces best weaners for weaner sales but at potential cost in breeder condition and supplements**
- **Identify the months you don't want calves and join accordingly**



# Controlled mating not practical?

- Breeder segregation enables better management of out of season calving cows
- First round dry pregnant cows are the problem out of season calvers
- Segregation on lactation and or pregnancy status enables better management or sale
- Aged out of season cows might be best sold
- Can reduce supplement costs by better targeting of supplement
- Can be as simple as a First round wet and dry draft

# Breeder segregation

## 1st round muster

### Wet cow group

- Wet cow (unweaned calf)
- Weaner mothers

### **Dry cow group**

#### Pregnancy test

Empty      Jun–Sep calf      Oct–Dec calf

## 2nd round muster

### Wean calves

#### Pregnancy test

Oct–Dec calf

Jan–Apr calf

Empty

### Brand calves

Wean some?

Pregnancy test dries?

# Summary

- **Cows lactating in the dry season will always be on a below maintenance diet**
- **Aim to calve breeders in store condition score or better**
- **Good breeder management reduces supplement requirements**
- **Weaning is the most important tool after stocking rate for managing body condition**
- **Use climate data to plan joining times**
- **Breeder segregation helps with management of out of season calvers**



# Extra support

- FutureBeef website
- DAF extension officer, phone: 13 25 23
- Workshops in CQ and SQ – FutureBeef event calendar

## Next webinar

15 September - Choosing and managing supplements

